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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,765	11/03/2005	Hartmut Meier	2380.0010000	5840

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
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PHAM, MINH CHAU THI

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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12/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,765	<b>Applicant(s)</b> MEIER ET AL.	
	<b>Examiner</b> MINH-CHAU T. PHAM	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 7-11, 15-19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Wong (2002/0108497 A1), Sen (5,535,989), Arvanitakis (3,246,452), Van Duijn (6,325,361 B1), Ferretti (3,266,224), Brown, Jr. et al (4,497,641), Clark (2,802,543), Marlowe (6,267,804 B1), Sibley et al (4,609, 386), Foidl (4,588,535), Lowery, Sr. (3,993,448).

Wong teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid (30) (see Figs. 1 & 3) and first and second walls (16) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Sen teaches a cleaning device (8) for process gases comprising the cleaning chamber with a cleaning liquid (4) (see Fig. 1) and first wall (7, 9, 10) and second wall (7, 9, 10) positioned within the cleaning chamber (5) to receive a film of the cleaning liquid.

Arvanitakis teaches a cleaning device for process gases comprising the cleaning chamber with sprayers (124) with cleaning liquid (30) (see Fig. 2) and first wall (106) and second wall (102) and so on positioned within the cleaning chamber to receive a film of the cleaning liquid.

Von Duijn teaches a cleaning device for process gases comprising the cleaning chamber (15) with a cleaning liquid (12, 13) (see Fig. 2) and first and second walls (5, 7) positioned within the cleaning chamber (15) to receive a film of the cleaning liquid.

Ferretti teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via weirs (28, 30, 32) (see Fig. 1) and first and second walls (20, 22) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Brown, Jr. et al teach a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (46) (see Fig. 3) and first and second walls (18, 20) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Clark teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (66) (see Fig. 2) and first and second walls (41, 39) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Marlowe teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (N) (see Fig. 1) and first and second walls (31, 33, 35) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Sibley et al teach a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (26) (see Fig. 2) and first and second walls (20) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Foisl teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid (11) (see Fig. 2) and first and second walls (21) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Lowery, Sr. teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (54) (see Fig. 1) and first and second walls (23, 24, 25) positioned within the cleaning chamber to receive a film of the cleaning liquid.

Regarding to the phrase “process gas in a reflow soldering system” has not been given patentable weight since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham 2 USPQ 2d 1647 (1987).

In addition the recitation “process gas in a reflow soldering system” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Claims 1-5 and 7-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hongo et al (4,775,499).

Hongo et al teach a cleaning device for process gases comprising the cleaning chamber (1) with a cleaning liquid (L) via sprayers (5) (see Figs. 1 & 2) and first and

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second walls (4) positioned within the cleaning chamber to receive a film of the cleaning liquid. Hongo et al further teach the cleaning device comprising a plurality of modular compartments (A, B, C, etc.) that are connected one after another in series (see Figs. 1 & 2).

### ***Response to Amendment***

Applicant's arguments filed on October 1, 2009 have been fully considered but they are not persuasive.

Applicant argues that the cited prior art "Arya et al does not teach a first and second deposition walls to receive a film of cleaning liquid". The Examiner now drops the Arya et al reference and newly introduces any one of Wong (2002/0108497 A1), Sen (5,535,989), Arvanitakis (3,246,452), Van Duijn (6,325,361 B1), Ferretti (3,266,224), Brown, Jr. et al (4,497,641), Clark (2,802,543), Marlowe (6,267,804 B1), Sibley et al (4,609, 386), Foidl (4,588,535), Lowery, Sr. (3,993,448), and Hongo et al (4,775,499) under the 102(b) rejection of the claims to show:

Wong teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid (30) (see Figs. 1 & 3) and first and second walls (16) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Sen teaches a cleaning device (8) for process gases comprising the cleaning chamber with a cleaning liquid (4) (see Fig. 1) and first wall (7, 9, 10) and second wall (7, 9, 10) positioned within the cleaning chamber (5) to receive a film of the cleaning liquid, as claimed.

Arvanitakis teaches a cleaning device for process gases comprising the cleaning chamber with sprayers (124) with cleaning liquid (30) (see Fig. 2) and first wall (106) and second wall (102) and so on positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Von Duijn teaches a cleaning device for process gases comprising the cleaning chamber (15) with a cleaning liquid (12, 13) (see Fig. 2) and first and second walls (5, 7) positioned within the cleaning chamber (15) to receive a film of the cleaning liquid, as claimed.

Ferretti teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via weirs (28, 30, 32) (see Fig. 1) and first and second walls (20, 22) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Brown, Jr. et al teach a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (46) (see Fig. 3) and first and second walls (18, 20) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Clark teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (66) (see Fig. 2) and first and second walls (41, 39) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Marlowe teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (N) (see Fig. 1) and first and second walls

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(31, 33, 35) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Sibley et al teach a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (26) (see Fig. 2) and first and second walls (20) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Foisl teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid (11) (see Fig. 2) and first and second walls (21) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Lowery, Sr. teaches a cleaning device for process gases comprising the cleaning chamber with a cleaning liquid via sprayers (54) (see Fig. 1) and first and second walls (23, 24, 25) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed.

Hongo et al teach a cleaning device for process gases comprising the cleaning chamber (1) with a cleaning liquid (L) via sprayers (5) (see Figs. 1 & 2) and first and second walls (4) positioned within the cleaning chamber to receive a film of the cleaning liquid, as claimed. Hongo et al further teach the cleaning device comprising a plurality of modular compartments (A, B, C, etc.) that are connected one after another in series (see Figs. 1 & 2), as claimed.

Regarding to the phrase “process gas in a reflow soldering system” has not been given patentable weight since it has been held that a recitation with respect to the



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manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham 2 USPQ 2d 1647 (1987).

In addition the recitation "process gas in a reflow soldering system" has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Applicant's arguments with respect to claims 1-20 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU T. PHAM whose telephone number is (571)272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duane Smith/  
Supervisory Patent Examiner, Art  
Unit 1797

/Minh-Chau T. Pham/  
Examiner, Art Unit 1797  
December 7, 2009